

42390P11158

PATENT

**CLAIM AMENDMENTS:**

1. (Currently amended) A method of generating a shadow in a virtual three-dimensional (3D) space, comprising:  
adjusting a resolution of a 3D model;  
projecting elements of the 3D model onto a surface in the virtual 3D space; and  
rendering a shadow having the adjusted resolution of the 3D model on the surface using  
the projected elements; and while concurrently rendering the 3D model at a  
resolution that is higher than the adjusted resolution.
2. (Original) The method of claim 1, wherein the elements of the 3D model are projected based on a location of a virtual light source in the virtual 3D space.
3. (Original) The method of claim 2, wherein the virtual 3D space includes a second virtual light source; and  
the method further comprises:  
adjusting the resolution of the 3D model to a second resolution;  
projecting elements of the 3D model onto a second surface in the virtual 3D space  
based on a location of the second virtual light source; and  
rendering a second shadow having the second resolution on the second surface using  
the elements projected on the second surface.
4. (Original) The method of claim 1, wherein adjusting comprises reducing the resolution of the 3D model.
5. (Original) The method of claim 4, wherein adjusting comprises removing elements of the 3D model.
6. (Original) The method of claim 5, wherein the 3D model comprises a multi-resolution model.

42390P11158

PATENT

7. (Original) The method of claim 1, further comprising:  
providing a user interface for use in adjusting the resolution of the 3D model.

8. (Previously canceled)

9. (Original) The method of claim 1, wherein the elements comprise vertices of the 3D model.

10. (Original) The method of claim 1 wherein the elements comprise polygons of the 3D model.

11. (Currently amended) An apparatus for generating a shadow in a virtual three-dimensional (3D) space, comprising:

a memory that stores executable instructions; and  
a processor that executes the instructions to:

adjust a resolution of a 3D model;  
project elements of the 3D model onto a surface in the virtual 3D space; and  
render a shadow having the adjusted resolution of the 3D model on the surface using  
the projected elements; and render while concurrently rendering the 3D model at  
a resolution that is higher than the adjusted resolution.

12. (Original) The apparatus of claim 11, wherein the elements of the 3D model are projected based on a location of a virtual light source in the virtual 3D space.

13. (Original) The apparatus of claim 12, wherein the virtual 3D space includes a second virtual light source and the processor executes instructions to:

adjust the resolution of the 3D model to a second resolution;  
project elements of the 3D model onto a second surface in the virtual 3D space based on  
a location of the second virtual light source; and  
render a second shadow having the second resolution on the second surface using the  
elements projected on the second surface.

42390P11158

PATENT

14. (Original) The apparatus of claim 11, wherein adjusting comprises reducing the resolution of the 3D model.

15. (Original) The apparatus of claim 14, wherein adjusting comprises removing elements of the 3D model.

16. (Original) The apparatus of claim 15, wherein the 3D model comprises a multi-resolution model.

17. (Original) The apparatus of claim 11, wherein the processor executes instructions to provide a user interface for use in adjusting the resolution of the 3D model.

18. (Previously canceled)

19. (Original) The apparatus of claim 11, wherein the elements comprise vertices of the 3D model.

20. (Original) The apparatus of claim 11, wherein the elements comprise polygons of the 3D model.

21. (Currently amended) An article comprising a machine-readable medium that stores executable instructions for selecting a target object in virtual three-dimensional (3D) space, the instructions causing a machine to:

adjust a resolution of a 3D model;

project elements of the 3D model onto a surface in the virtual 3D space; and

render a shadow having the adjusted resolution of the 3D model on the surface using the

projected elements; and render while concurrently rendering the 3D model at a resolution that is higher than the adjusted resolution.

42390P11158

PATENT

22. (Original) The article of claim 21, wherein the elements of the 3D model are projected based on a location of a virtual light source in the virtual 3D space.
23. (Original) The article of claim 22, wherein the virtual 3D space includes a second virtual light source and the article further comprises instructions that cause the machine to:  
adjust the resolution of the 3D model to a second resolution;  
project elements of the 3D model onto a second surface in the virtual 3D space based on a location of the second virtual light source; and  
render a second shadow having the second resolution on the second surface using the elements projected on the second surface.

24. (Original) The article of claim 21, wherein adjusting comprises reducing the resolution of the 3D model.

25. (Original) The article of claim 24, wherein adjusting comprises removing elements of the 3D model.

26. (Original) The article of claim 25, wherein the 3D model comprises a multi-resolution model.

27. (Original) The article of claim 21, further comprising instructions that cause the machine to provide a user interface for use in adjusting the resolution of the 3D model.

28. (Previously canceled)

29. (Original) The article of claim 21, wherein the elements comprise vertices of the 3D model.

30. (Original) The article of claim 21, wherein the elements comprise polygons of the 3D model.